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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,136	09/09/2003	Young-Wun Song	0630-1833P	1908

2292 7590 10/22/2007

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EXAMINER	
THERIAULT, STEVEN B	

ART UNIT	PAPER NUMBER
2179	

NOTIFICATION DATE	DELIVERY MODE
10/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/657,136	SONG, YOUNG-WUN	
	Examiner	Art Unit	
	Steven B. Theriault	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-10,12 and 14-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1–4, 6-10, 12, 14-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the following communications: Non-provisional application filed 07/27/2007.

This action is made Final.

2. Claims 1–4, 6-10, 12, 14-17 are pending in the case. Claims 1 and 7 are the independent claims. Claims 5, 11, and 13 are the cancelled claims. Applicant is advised that a new Examiner has been assigned to the case.

Claim Rejections - 35 USC § 102

3. **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-4, 6-10, 12, 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Humpleman et al. (Hereinafter Humpleman) U.S. Patent No. 6198479 issued Mar. 6, 2001.**

In regard to **Independent claim 1,** Humpleman teaches a method for displaying positions of home network appliances, comprising:

- Receiving an appliance characteristics data stream from the home network appliances connected to a home network (See Genip process and column 11, lines 20-67 and column 12, lines 1-35). Humpleman teaches a process for determining when a new device has been added to the network and receives the configuration information for the device.
- Reading an appliance type identifier for indicating a type of each home network appliance connected to the home network and an appliance inherent identifier of the home network

appliance, from the received appliance characteristics data stream (See column 13, lines 25-37). Humpleman teaches the system reads the properties file based on the device identifier to retrieve information to display the device in the network. Humpleman teaches that when the user selects the device button (See figure 10) the inherent identifiers for a service (e.g. dads TV) for such things as a TV, VCR, or CD player. From there, the system displays the controls for a VCR and CD player.

- Generating an appliance identifier by linking the read appliance type identifier with the read appliance inherent identifier (See column 13,lines 1-67 and column 15, lines 20-30). Humpleman teaches the system uses the device file list that contains identifiers to build the tree of the network. The session manager uses the tree to link services to the devices.
- Setting a position pointer for indicating a position of each home network appliance (See figure 7, column 14, lines 1-12). Humpleman teaches the user can group the devices into a room by setting a position pointer for each appliance.
- Reading a text object corresponding to the position pointer from a text library, wherein the text library comprises text objects for indicating positions of home network appliances; combining a graphic object corresponding to the appliance identifier with the text object corresponding to the position pointer (See column 13, lines 25-67). Humpleman teaches reading the device list file that contains the room information established by the user and having text associated with the Icon for the given device (See column 14, lines 5-12) and also the (user.html file) can be considered a text object associated with the device.
- Displaying the combined graphic and text object on a screen (See figure 6-7).

With respect to **dependent claim 2,** Humpleman teaches the method wherein the appliance identifier indicates a model name and a serial number of the home network appliance (See column 10, lines 1-10).

With respect to **dependent claim 3,** Humpleman teaches the method wherein ~~the appliance identifier includes an identifier for indicating a type of the home network appliance and an~~ the appliance inherent identifier ~~for indicating~~ indicates a serial number of the home network appliance (See column 10, lines 1-10 and column 11, lines 25-40). A dedicated IP address along with a model number can be considered a serial number. Given the device list and the arbitration protocol that distinguishes each device from one another, identification of devices can be made even if similar devices are connected to the network (See column 11, lines 9-35).

With respect to **dependent claim 4,** Humpleman teaches the method wherein the position pointer indicates positions of the different types and the same type of home network appliances (See figure 7 and column 14, lines 1-12). The user can configure the network as they see fit were items can be in one room or they can be placed in similar bin for the same device types.

With respect to **dependent claim 6,** Humpleman teaches the method wherein the displaying step displays the combined graphic and text object on the screen in order to make a user easily recognize a home network appliance to control (See Figure 7 and column 14, lines 1-10). Humpleman teaches the user can assign text to an item and the device already has an Icon that is considered a graphical object.

In regard to **claims 7-10 and 12,** claims 7-10 and 12 reflect the apparatus comprising computer readable instructions for performing the steps of method claims 1-4, and 6, respectively, and are rejected along the same rationale.

With respect to **dependent claim 14,** Humpleman teaches the apparatus wherein the appliance identifier-generating unit includes:

- A network interface module for receiving the appliance characteristics data streams stream from the home network appliances (See DHCP server, Column 11,lines 7-31).

- A stream processing module for reading an appliance type identifier and ~~a product~~ the appliance inherent identifier from the received appliance characteristics data stream and generating an the appliance identifier by linking the read appliance type identifier with the ~~product~~ appliance inherent identifier (See column 13, lines 25-37). Humpleman teaches the system reads the properties file based on the device identifier to retrieve information to display the device in the network. Humpleman teaches that when the user selects the device button (See figure 10) the inherent identifiers for a service (e.g. dads TV) for such things as a TV, VCR, or CD player. From there, the system displays the controls for a VCR and CD player.
- A text library for storing the appliance identifier generated in the stream-processing module (See Device List File, column 11, lines 45-67 and GENIP database, column 12, lines 10-35).
- A text processing module for adjusting a text size of the appliance identifier stored in the text library according to a preset font file (See column 6, lines 55-67 and column 9, lines 55-60 and column 10, lines 25-35 and column 14, lines 1-15). Humpleman teaches a process using a standardized presentation process, by using HTML files that keeps the Icons and logos the same size in the display for easier presentation, which can include text processing when the model number of the device is included with the logo.

With respect to **dependent claim 15,** Humpleman teaches the apparatus wherein the stream-processing module includes:

- A preprocessor for parsing the appliance characteristics data stream received from the network interface module (See column 12, lines 9-37). The GENIP process can

be considered a pre-processor as it maintains a pre-defined list of devices and polls the device set prior to the DHCP server having the device in the device list. Once the GENIP process id's the device then the DHCP server extracts the information for the system.

- A buffer for storing the appliance characteristics data stream parsed in the preprocessor (See column 12, lines 35-40). The system would use memory to write a new database list and replace the old once the new device was detected in the GENIP process.
- A buffer manager for storing the appliance characteristics data stream parsed in the preprocessor in the buffer and outputting a register signal corresponded to the temporarily stored appliance characteristics data stream (See column 12, lines 1-67). The GENIP process outputs a signal to the devices where the common directory of the device list database is stored (See column 12, lines 40-52).
- A generator for reading the appliance type identifier and the product inherent identifier from the appliance characteristics data stream stored in the buffer according to the register signal outputted from the buffer manager and generating the appliance identifier by linking the read appliance type identifier to the product inherent identifier (See column 13, lines 25-37). Humpleman teaches the system reads the properties file based on the device identifier to retrieve information to display the device in the network. Humpleman teaches that when the user selects the device button (See figure 10) the inherent identifiers for a service (e.g. dads TV) for such things as a TV, VCR, or CD player are identified to the user and the system. From there, the system displays the controls for a VCR and CD player. Another interpretation provides that the IP address is determined for a given device (See column 11, liens 1-30) and with the device comes a set a predefined properties of the device that can include a host of inherent identifiers.

Claim Rejections - 35 USC § 103

5. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (Hereinafter Humpleman) U.S. Patent No. 6198479 issued Mar. 6, 2001 in view of Humpleman (Hereinafter Humpleman') U.S. Patent No. 6546419 issued Apr. 8, 2003.**

In regard to **dependent claims 16 and 17,** as indicated in the above discussion, Humpleman teaches every limitation of claim 15.

Humpleman teaches the wherein the position matching unit includes a position matching module for matching the appliance identifier indicated by the indicating module to a pertinent position pointer according to a user operational key signal (Humpleman Figure 7-8, 10 and column 15, lines 5-55). Humpleman shows the user can group the devices as they see fit on the display, which is a position indicator. The device link page 710 would show the grouping in the interface as shown in figure 7. The user selects the device with the pointer and figure 10 is displayed. Humpleman teaches a text library for storing a text object corresponded to the position pointer recorded in the position list and a graphic library for storing a graphic

object corresponded to the appliance identifier and a storing module for storing the text object and the graphic object read by the library managing module (See GENIP process column 12,lines 1-35 and DHCP discovery process column 11, lines 20-67 and column 7, lines 34-67). Humpleman shows the discovery process can read a device profile, extract the HTML files containing properties of the device, a logo and Icon (graphic) along with text describing the device and stores the information in the device list database. The GENIP process is a and discovery process is a managing module for reading the appliance identifier matched to the pertinent position pointer by searching the position list according to a display request signal generated by the use because the user can organize the devices into groups and the group information is stored in the device list. The device list and database area a library managing module for reading the graphic object for indicating the appliance identifier read in the list in the managing module from the graphic library and the text object matched to the appliance identifier from the text library because a given devices GUI is matched to the database of items and then the GUI is displayed in the system of Humpleman. Humpleman teaches that text items can be saved along with the graphical object (See column 14, lines 1-15) where the text entered by the user will be displayed in the interface along with the logo where the user has grouped them, which is a given position. The display of Humpleman contains a display that displays the graphical position of the item on the screen (See figure 7).

Humpleman does not expressly teach a position matching table set so as to record the appliance identifier according to a position pointer and an indicating module for indicating the appliance identifier adjusted in the text processing module and the position pointer set in the position matching table and a matching table managing module for distinguishing the home network appliances by recording the appliance identifier on the position matching table by the position pointer according to the information matched in the position matching module. However, this limitation would have been obvious to one of ordinary skill in the art at the time

of the invention, in view of Humpleman', because Humpleman' teaches the use of an attributes table that contains both the device ID and the device location. Further, Humpleman' teaches the device manager can use the table to match the device capabilities to provide a service (See column 9,lines 35-67 and column 10, lines 1-20). Humpleman' teaches the use of the table is for the purpose of storing location information along with other attributes. The motivation to combine Humpleman with Humpleman' comes from the suggestion in Humpleman' that multiple devices can be on a home network and a need exists to allow the user to match a given service to a given device and deliver the service to the user device of choice that is located in the place the user most desires (See column 2, lines 20-37). The two Humpleman references both teach the process of identifying the devices on a home network. They both teach the GENIP process and contain similar teachings in their disclosures and the Humpleman' references is an extension over the previous reference. Therefore, the structure of both references provides for a reason and rationale to combine the references.

Response to Arguments

Applicant's arguments with respect to claims 1–4, 6-10, 12, 14-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from he mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M, W, F 10:00AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven B Theriault/
Patent Examiner
Art Unit 2179

WEILUN LO
SUPERVISORY PATENT EXAMINER